

**IN THE SPECIFICATION:**

**Please replace paragraph 2 at page 4, with the following rewritten paragraph:**

In this case, in view of a structure of the least-square method, such coefficient data is created as to reduce an error at a portion with a higher frequency, that is, a portion with a smaller dynamic range. Therefore, at a portion with a larger frequency, that is, a portion with a larger dynamic range, an error with respect to a true value of the pixel data of the HD signal calculated by the estimate equation is liable to be ~~larger~~ smaller.

**Please replace paragraph 2 at page 57, with the following rewritten paragraph:**

The LUT production apparatus 300 further comprises an error addition circuit 315 and an error memory 316 as error addition means and error-sum accumulation means, respectively. This ~~pixel error~~ addition circuit 315 adds an error E (p) obtained by the prediction error calculation circuit 313 with an error E (q) (q=1 to N) obtained by the all-the-class prediction error calculation circuit 314, to obtain an error sum (E (p) +E (q) (q=1 to N) of each class. Further, the error addition circuit 315 adds a value that corresponds to a magnitude of each error sum of each class to an accumulated value of each output class at an input class that corresponds to a class code Ca obtained by the class categorization circuit 304.

**Please replace paragraph 1 at page 66, with the following rewritten paragraph:**

It is to be noted that instead of storing the control program etc. in the ROM502 as described above beforehand, it may be downloaded via the communication section 508 from the communication network 507 such as the Internet for example so that it can be stored in the hard disc drive 505 or the RAM ~~303~~ 503 and used. Further, the control program etc. may be provided in a removable recording medium.